

Surface Grinder HFS F Advance

Precision and ease-of-use for maximum production efficiency



- extensive standard equipment
- The cast-iron machine frame features superior rigidity and torsional strength, precision guideways and excellent machining quality
- · All guideways are lubricated reliably via a central lubrication system
- · The workspace is protected by an easily accessible enclosure
- A powerful coolant pump is combined with a vacuum exhaust unit to clear grinding dust and aerosol during machining operations

Grinding spindle

- Large grinding spindle, dynamically balanced, completely sealed with permanent lubrication
- Preloaded precision-bearings ensure maximum grinding performance and high reliability over many production hours

Hydraulics

- Superior quiet operation and low heat build-up ensure optimum work results in continuous operations
- Hydraulically operated linear table movement, infinitely variable, high consistency, and soft reversal of direction
- The external hydraulics unit with oil cooler ensures perfect temperature stability

Magnetic clamping plate

- Large magnetic chuck allows for torsion-free clamping and is included in standard equipment
- The control unit is integrated into the electric system to simplify operation, allowing quick clamping and degaussing for maximum production efficiency





If set to Auto mode, the user-defined roughing and finishing parameters, number of spark-out strokes, and return to zero are automatically processed

Programming

- The high-quality preloaded ball screw and a powerful servo-motor ensure high precision and repeatability of positioning on the Y-axis
- The machine features an electronic hand-wheel for configuration tasks and manual movement of the grinding spindle
- If set to Auto mode, the user-defined roughing and finishing parameters, number of spark-out strokes, and return to zero are automatically processed

Standard Equipment

2-axis position indicator, electronic hand-wheel, grinding wheel flange, automatic central lubrication, workspace enclosure, coolant system and vacuum system, grinding wheel dresser, balancing station, balancing shaft, LED work lamp, magnetic clamping plate, adjustment screws, operating tools, degausser, Siemens PLC with touchscreen, operator manual

Specifications HFS Advance		2550 F	3063 F	4080 F	30100 F	40100 F
Working Area						
Work piece weight (max.)	lbs	396	594	1,100	880	1,320
Spindle nose-to-table surface distance	in	18	23	23	23	23
Table dimensions	in	20x10	25x12	32x16	40x12	40x16
Dimensions magnetic clamping plate	in	20x10	24x12	31x16	39x12	39x16
Scale ring division Y-axis	in	0.0002	0.0002	0.0002	0.0002	0.0002
Scale ring division Z-axis	in	0.00079	0.00079	0.00079	0.00079	0.00079
Auto. transverse feed Z-axis	in	0 - 0.31	0 - 0.31	0 - 0.31	0 - 0.31	0 - 0.31
Speed	rpm	2,850	1,450	1,450	1,450	1,450
Auto. vertical feed	in	0.0002 - 0.00197	0.0002 - 0.00197	0.0002 - 0.00197	0.0002 - 0.00197	0.0002 - 0.00197
Travels						
Travel X-axis	in	22	30.1	35.8	44.5	44.5
Travel Y-axis	in	11	13	18	13	18
Feed						
Hydr. feed X-axis	in/min	273 - 897	273 - 897	273 - 897	273 - 897	273 - 897
Rapid feed Y-axis	in/min	19	19	19	19	19
Rapid feed Z-axis	in/min	39	39	39	39	39
Drive Capacity						
Motor rating main drive	Нр	3	5.4	5.4	5.4	5.4
Measures and Weights						
Grinding wheels dimensions	in	8x1x1	14x2x5	14x2x5	14x2x5	14x2x5
Overall dimensions (length x width x height)	in	91x63x66	114x87x75	142x94x75	173x87x75	173x94x75
Weight	lbs	3,960	6,160	7,480	7,040	8,140
Part No.		124931	124932	124933	124941	124930